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**United States Patent [19]****Bulovic et al.****Patent Number: 5,834,893****Date of Patent: Nov. 10, 1998****[54] HIGH EFFICIENCY ORGANIC LIGHT EMITTING DEVICES WITH LIGHT DIRECTING STRUCTURES**

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H05B 33/14

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**[57] ABSTRACT**

An organic light emitting device (OLED) structure having reflective surfaces is fabricated in a pit formed in a substrate. The pit has slanted reflective side walls which redirect light that is waveguided in the organic layers of the OLED to a direction substantially normal to the plane of the substrate. The reflective structure can also be formed with a planar configuration over interconnects covered with a polyimide.

**31 Claims, 9 Drawing Sheets**

